

**Claims**

1. A process for forming a joint formed between two overlapping portions of polymeric material comprising welding the overlapping portions to create a joint region and applying a tensile force to the joint region, the force being of sufficient strength to elongate the joint region, thus thinning the joint region.
2. A process as claimed in claim 1 wherein the tensile force is a stretching force applied between regions of the material on either side of the joint.
3. A process as claimed in claim 1 wherein the force range is 0.75 - 1.5 pounds force (lbf).
4. A process as claimed in claim 1 wherein the two overlapping portions of polymeric material are a catheter shaft and a balloon neck.
5. A process as claimed in claim 1 wherein the balloon neck is clamped on either side of the joint region, and the tensile force is applied between the clamped regions.
6. A process as claimed in claim 1 wherein the tensile force is applied to a cold joint.
7. A process as claimed claim 1 wherein the tensile force is applied to a heated joint.
8. A process as claimed in claim 7 wherein the joint is heated by the application of hot air.